

Appl. No. 10/709,664
Amdt. dated December 22, 2004
Reply to Office action of September 22, 2004

Amendments to the Claims:

Claim 1 has been amended by merging claim 8 (previously dependent on claim 1) with it.
No new matter is introduced.

Claim 14 has been added, dependent on claim 1. No new matter is introduced.

- 5 Claim 15 has been added, dependent on claim 9. No new matter is introduced.

Listing of Claims:

1. (amended) A method for forming a light emitting diode comprising following steps:
forming a first stack;
forming a second reaction layer over said first stack;
10 forming a second stack;
forming a first reaction layer over said second stack;
holding together said first reaction layer and said second reaction layer by means of
a transparent adhesive layer;
wherein the first and second reaction layers each comprise material selected from a
15 group consisting of SiNx, Ti, and Cr.
2. (original) The method of claim 1 wherein the step of forming a first stack comprises
following steps:
providing a first substrate;
20 forming a second contact layer on the first substrate;
forming a second cladding layer on the second contact layer;
forming an emitting layer on the second cladding layer;
forming a first cladding layer on the emitting layer;
forming a first contact layer on the first cladding layer; and
25 forming a transparent conductive layer on the first contact layer.

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3. (original) The method of claim 2 further comprising following steps:
removing the first substrate;
etching the second contact layer, the second cladding layer, the emitting layer, first
cladding layer, and the first contact layer; and
5 forming a first electrode on the second contact layer, and a second electrode on the
transparent conductive layer.
4. (original) The method of claim 2 wherein the first substrate comprises at least one
10 material selected from a group consisting of GaP, GaAs, and Ge.
5. (original) The method of claim 2 wherein the first contact layer and the second
contact layer each comprise at least one material selected from a group consisting of
GaP, GaAs, GaAsP, InGaP, AlGaInP, and AlGaAs
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6. (original) The method of claim 2 wherein the first cladding layer, the emitting layer,
and the second cladding layer each comprise AlGaInP.
7. (original) The method of claim 2 wherein the transparent conductive layer
20 comprises at least one material selected from a group consisting of indium tin oxide,
cadmium tin oxide, antimony tin oxide, zinc oxide, zinc tin oxide, BeAu, GeAu, and
Ni/Au.
8. (cancelled)
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9. (original) The method of claim 1 wherein the transparent adhesive layer comprises
at least one material selected from a group consisting of PI, BCB, and PFCB

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10. (original) The method of claim 1 wherein forming a second stack comprises forming a second substrate.
11. (original) The method of claim 10 wherein the second substrate comprises at least one material selected from a group consisting of SiC, Al₂O₃, glass materials, quartz, GaP, GaAsP, and AlGaAs.
12. (original) The method of claim 1 wherein said first reaction layer and said second reaction layer are held together with the transparent adhesive layer by chemical bonds.
13. (original) The method of claim 12 wherein the chemical bonds are hydrogen bonds or ionic bonds.
14. (new) The method of claim 1 where the first and second reaction layers comprise SiN_x.
15. (new) The method of claim 9 where the transparent adhesive layer comprises BCB or PFCB.